City of Fort Wayne

Biosolids Handling Facility

Information & Product Sales (260) 427-5535

Business Hours:

April 1 to November 30

Monday thru Saturday 8:00 am – 6:00 pm Sunday 12:00 pm to 6:00 pm Ending Load time 6:00 p.m. daily

December 1 to March 30

7:00 am – 3:00 pm Monday thru Friday Ending Load times 2:30 p.m. daily

Pricing

Biosolids

\$12.20/ton+tax

<u>Free to residents that load</u> themselves.

Contact:

Travis Medina 6202 Lake Ave. Fort Wayne, IN 46815

Biosolids Products: Information

Call (260) 427-5535 Fort Wayne Biosolids Handling Facility for Biosolids Product sales and information on the innovative recycling program of the City of Fort Wayne and the Water Pollution Control Plant.

Benefits of Biosolids

Biosolids provide soils with the nutrients that tend to be deficient in Indiana soils. Biosolids products are used in landscaping and gardening in the following ways:

As a soil amendment: Biosolids products that are available for public use improve the physical characteristic of the soil. Compact and clay-like soils are made lighter and more porous, sandy soils benefit from improved water retention.

As a mulch: The addition of biosolids yard waste blended as a mulch reduces watering requirements, and adds beauty to the landscape.

As a potting medium: When mixed with potting soil, biosolids products provide an ideal medium for potted plants and greenhouse containers. Biosolids blends, makes an excellent substitute for manure composts, peat moss and other components of typical soil mixes.

How It Works

Biosolids used in landscaping and gardening must meet the US EPA "Exceptional Quality" requirements and any state requirements. Treatment processes such as composting, heat treatment or thermophilic digestion help to satisfy the federal standard. Every day, over 27 dry tons of primary and secondary waste-activated sludge from the City's wastewater treatment plan is stabilized by a process call anaerobic digestion. The process occurs in large tanks or digesters. Liquid and solid wastewater residuals are separated to allow sludge more time to break down in the digesters. This process significantly reduces the amount of time needed for air-drying and reduces any pathogen levels in the sludge. Treated sludge is moved from the digesters to 55 acres of drying basins. Biosolids are air-dried for 3+ years and turned with special equipment. The Biosolids are then combined with bulking agents and formed into windrows. Waste products (tree trimming and yard waste), which would ordinarily be disposed of in landfill, are utilized as bulking agents, significantly reducing the cost of waste disposal for Fort Wayne residents. Final testing is done on biosolids products at this time to ensure compliance with Indiana regulations. The wastewater residuals are converted into a stable organic product that can be safely used by the public in accordance with the City of Fort Wayne's Marketing and Distribution Permit.

Recommendations For Storage

Biosolids shall be stored away from waterways and protected for erosion control during rain and flood events. Biosolids shall not be stored on steep inclines. Storage distances should be maintained from neighboring buildings/structures.

Nutrient Analysis*

Element Lab April 2023 (dry weight basis)

Total Nitrogen 0.865% Phosphorous 1.41% Potassium 0.223%

Plant Available Nitrogen (PAN)

PAN 4.5 lbs./dry ton

Industrial, commercial and farm users follow these guidelines

Crop lbs. of PAN
Per Acre

Corn 200 lbs
Soybeans 100 lbs
Hay, pasture 100 lbs
Cereal grain 100 lbs
Set aside/idle 50 lbs

Beneficial Micronutrients

Pounds/Dry Ton

Cu		0.538
Zn		1.02
Mg	(est)	24.0
Mn	(est)	1.50
Ca	(est)	111
В	(est)	0.0458
S	(est)	17.5

Biosolids Products: Information

Recommended Indiana Application Rates: The recommended amounts of Fort Wayne's biosolid products are based on Plant Available Nitrogen (PAN). The calculated PAN and recommended application rates, established in accordance with IDEM's regulations found at IDEM 327 I.A.C. are included on the left side of this user information sheet. Further analysis is available upon request.

Vegetable Gardens: Initial Spring Preparation: Spread the recommended amount of biosolids product evenly over the surface and till into root zone. Smooth surface, plant seeds or plant and top dress with $\frac{1}{2}$ " of material. **During the Summer:** To increase moisture retention top dress with $\frac{1}{2}$ " of biosolids material. **Initial Fall Preparation:** Spread recommend amount of biosolids material evenly over the surface and leave untouched until spring. It is recommended that only one of the above mentioned applications be made during the year. *Soil tests need to be done and a pH of 6.5 maintained in the soil when Biosolids Products are applied to land used for food crops*.

As a mulch: The addition of biosolids yard waste blended as a mulch reduces watering requirements, and adds beauty to the landscape. No more than one inch.

Tree and Shrubs: To encourage deep rooting, dig 1-2" deeper than the actual rootball. Mix one (1) part biosolids product with one (1) part existing soil to fill the first 1-2" hold, then add an additional 1-2" of soil. Place rootball in the hole, surround and cover it firmly with a mixture of one (1) part biosolids product and two (2) parts soil. After watering and settling, top dress with an additional 2" of biosolids products. In the case of a heavy compacted soil the biosolids should be tilled in to a depth of 12" and shaped in to a mound before planting the tree or shrub.

New Lawns: Spread ½" of biosolids products over area, lightly till into soil before seeding.

Established Lawns: Once every year, cut grass to medium height, spread ½" of biosolids products over the area, irrigate and rake lightly to incorporate. Application may best be done in early spring but could also be done in July or October. Additional nitrogen applications may be desired if a deep green appearance is required all year long.

Flowers and Berries: Top dress with 1" of biosolids products in the spring or early summer. This recommendation is for residential users using small potted plants.

Potted Plants: Top dress with 1" of biosolids products initially and/or when replanting.

Bulbs and Tubers: Apply a handful of biosolids product when planting each bulb or set and top dress with an additional 1".

The City of Fort Wayne is licensed by the Indiana Department of Environmental Management and meets all Federal EPA 40 CFR 503 regulations. This product can be custom designed to create a soil amendment for specific problems, including difficult or unproductive growing locations. *Biosolids products are to be used only in accordance with the instructions on this information sheet.*

*Before utilizing the biosolids product in a state other than Indiana, users shall contact the states environmental agency and review applicable law to determine if the use is permitted, if pre-approval is required, and the application rates